

(19) World Intellectual Property  
Organization  
International Bureau



553 328

(43) International Publication Date  
6 January 2005 (06.01.2005)

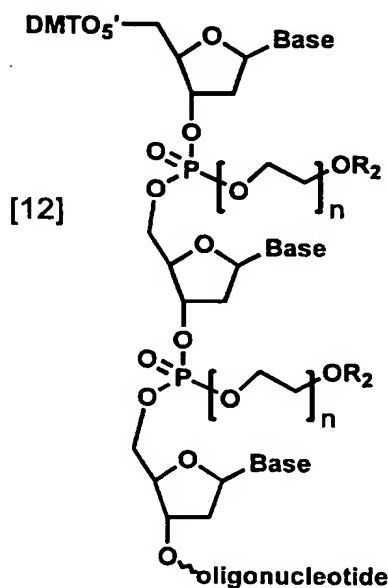
PCT

(10) International Publication Number  
**WO 2005/000859 A2**

- (51) International Patent Classification<sup>7</sup>: **C07H** (81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (21) International Application Number: PCT/US2004/011489
- (22) International Filing Date: 14 April 2004 (14.04.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 60/462,753 14 April 2003 (14.04.2003) US
- (71) Applicant (*for all designated States except US*): UNIVERSITY OF HOUSTON [US/US]; 4800 Calhoun Road, Houston, TX 77204-2015 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (*for US only*): GAO, Xiaolian [US/US]; 4800 Calhoun Road, Houston, TX 77204-2015 (US). YU, Pelilin [US/US]; 4800 Calhoun Road, Houston, TX 77204-2015 (US).
- (74) Agent: HEADLEY, Tim; Gardere Wynne Sewell LLP, 1000 Louisiana, Suite 3400, Houston, TX 77002 (US).
- (84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published: — *without international search report and to be republished upon receipt of that report*

[Continued on next page]

(54) Title: NOVEL REAGENT COMPOUNDS AND METHODS OF MAKING AND USING THE SAME



R<sub>2</sub> = CH<sub>3</sub>, alkyl, phenyl, CONH<sub>2</sub>  
n = 1 – 20

(57) Abstract: The present invention describes novel compounds and methods for capping reactive groups on support and during multistep synthesis. These new capping reagents are also useful for high quality synthesis on solid supports and surfaces used as microarrays, biosensors, or in general as biochips. The compounds are also useful for controlling surface density of reactive groups on a support. The compounds may also be used to modify the hydrophilic/hydrophobic characteristics of a surface or a molecule. The compounds have functional utility in various applications in the fields of genomics, proteomics, diagnostics and medicine.

WO 2005/000859 A2



---

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*